

This lesson is part of a larger, comprehensive school garden guide called **Minnesota School Gardens: A Guide to Gardening and Plant Science** developed by Minnesota Agriculture in the Classroom in 2013. The entire guide is available at www.mda.state.mn.us/maitc.



Grade

Elementary K-5

Materials

- ☐ Teacher Material A – Go, Glow, Grow – one per teacher
- ☐ MyPlate icon found at <http://www.choosemyplate.gov/print-materials-ordering/graphic-resources.html>
- ☐ Empty, clean food containers such as boxes, bags, or cans without sharp edges (students can bring these from home) or fruit and vegetable samples from the garden
- ☐ Plastic or paper grocery bag - one per student (students can bring their food containers in them)
- ☐ 5 paper grocery sacks and markers (label one bag for each food group: Grain, Vegetables, Fruits, Milk, Meat/Beans, on one side; on the other side write GO on the Grain sack, GLOW on the Vegetables and Fruits sacks; and GROW on the Milk and Meat/Beans sacks)
- ☐ Masking tape, ball of yarn, or colored chalk to mark the floor
- ☐ Writing instruments

Fun Fact

Rhubarb's nickname is the "pie plant" because that is the primary use for this vegetable.



The Healthy Hop 'n Shop

Minnesota K-12 Academic Standards

Science	0.4.1.1 1.4.1.1 2.4.1.1 3.4.1.1 5.4.1.1	Living things are diverse with many different observable characteristics.
Health	2.8.1	The student will express information and opinions about health information and ideas.
Health	3.7.2	The student will demonstrate strategies to improve or maintain personal health.
Health	5.7.2	The student will describe responsible health behaviors.

Summary/Overview

Students learn about the USDA MyPlate through a pretend grocery store. They also learn the importance of each food group.

Garden Connection

Garden produce fulfills two of the food groups in the USDA's MyPlate nutritional guide.



Background Information

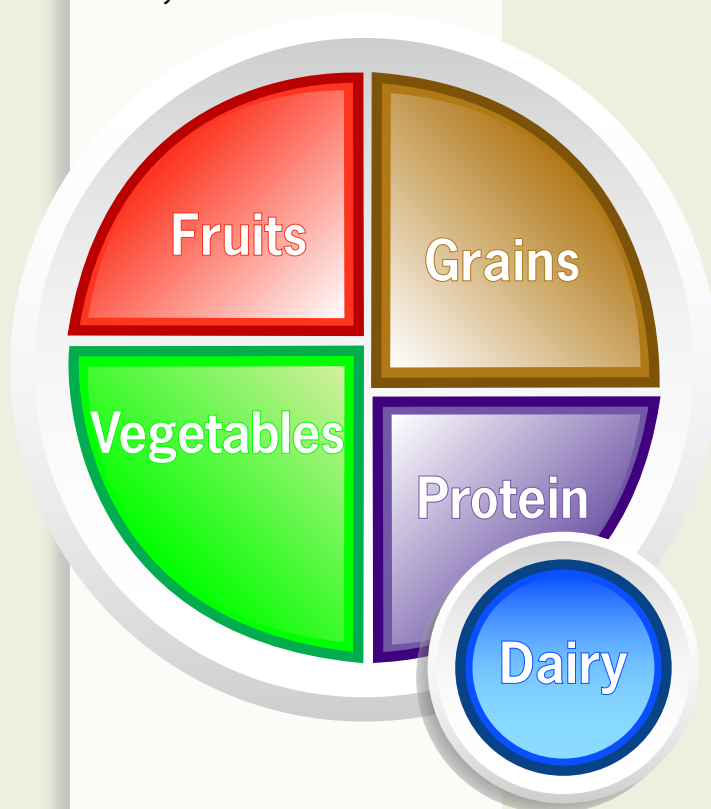
The United States Department of Agriculture's MyPlate is a nutritional guide to help us choose what to eat. The plate is a visual representation of the suggested amounts of food to eat from each food group. Further suggestions include drinking skim or 1% milk, getting half of a person's grain intake from whole grains, eating a variety of protein, and reducing the amount of sodium and sugar consumed. Find more information on MyPlate at <http://www.choosemyplate.gov/>.

Objectives

- Categorize foods into food groups.
- Explain why it's important to eat foods from each food group and exercise every day.
- Describe the USDA MyPlate icon.

Preparation

Select a place with enough open space for students to make a large MyPlate circle on the floor. Divide the circle into four sections: one each for fruit, vegetable, grain, and protein. Also add a smaller circle for dairy; refer to the MyPlate diagram for placement and size of sections. The MyPlate circle will become the Healthy Hop 'n Shop grocery store and each food group will be a section of the store. Have the paper grocery sacks labeled and ready to place in each food group section. Go through the food containers and garden produce to make sure there is one package or item for each student and each of the food groups are represented. Display the MyPlate icon in a place where everyone can see it.



Procedure

Interest Approach

Point out the MyPlate icon to students. Ask if they have seen the icon before and if they know what it represents. Count the number of food groups with students. Mention that in addition to eating healthy foods it is important to get daily exercise. Brainstorm a list of physical activities the students enjoy.

Summary of Content and Teaching Strategies

Instruct students to move to the wide-open space. Have them stand in a large circle holding hands with arms outstretched. Give the end of the masking tape or ball of yarn to a student. Unroll the tape or yarn placing it in front of the students' feet until the circle is complete. Next add lines to divide the plate into four sections with vegetables and grains slightly bigger than fruits and protein. Finally, create a smaller circle for dairy.

Your students have just created the Healthy Hop 'n Shop grocery store. The food groups are the sections of the grocery store. Students are the grocery store customers and employees.

Grocery Store Employees

Have the students sit on the floor around the yarn/tape circle. Distribute the empty food containers (or food samples). Go around the circle and have the students identify the food they have and tell to which food group it belongs. Offer support if a student is not able to identify his/her food and its group. Students place their items in the correct section of the Healthy Hop 'n Shop grocery store.

Demonstrate how the students are going to become grocery store employees, stocking food at the Healthy Hop 'n Shop. Use a grain product container, go to the grain section, and say, "I'm stocking cereal (or whatever your grain product is)," hop to the grain sack, and put your food container in the grocery sack. Then walk back to where you were sitting.

Have everyone that has a grain product line up at grain section and say, "I'm stocking (whatever food item they have)." Have them hop, one at a time, to the sack, put their container inside, and walk back to their seat.

Repeat this until everyone has put their grain, vegetable, fruit, milk, and meat/beans items into the sacks at the Healthy Hop 'n Shop grocery store. Discuss how produce grown in the garden can be sold at grocery stores and farmers' markets.

Go, Glow, Grow

Refer to the chart below when teaching students about Go, Glow, and Grow. The foods we eat provide us with one of three powers. Review the food groups and their special power with students. Then ask students to name examples of food from each group. Next have them name examples of food we eat that contain food from each group. Finally, have students do the activity listed in the last column of the chart below. Use Teacher Material A as a visual if desired.

Food Group	Power	Examples	Foods	Activity
Grain	"Go"	corn, soybeans (grown as a grain, but really a legume), wheat, oats, and rice	cereal, bread, rice, pancakes, popcorn, pasta	Students stand up and pretend they have run out of power or energy – like a car that's running out of gas. Next, pretend they have lots of power or energy to "Go."
Vegetables	"Glow"	lettuce, onions, carrots, potatoes	Salad, salsa, vegetable soup	Students stand up and show others what they look like when they have a stomachache. Next, they smile really big to show off their healthy gums, skin, eyes, hair, and bodies.
Fruits	"Glow"	apples, strawberries, blueberries, raspberries, grapes, pears, peaches, plums	apple sauce, prunes, raisins, fruit smoothies	Students stand up and show others what they look like when they have a stomachache. Next, they smile really big to show off their healthy gums, skin, eyes, hair, and bodies.
Milk	"Grow"	mostly animals, except for soymilk from soybean plants	yogurt, cheese, ice cream, sour cream	Milk helps bones and teeth to grow strong and healthy. Everyone smiles, shows off their teeth, and does a "strong bones" stance.
Meat/ Beans (Protein)	"Grow"	mostly animals, except for beans from bean plants	hamburgers, hot dogs, meat balls, black beans	Meat and beans help bodies to heal, and they help to build strong muscles. Students stand and show off their muscles.

Grocery Store Customers

Have students get the individual grocery bags they brought in. It's time to go grocery shopping! In the meantime, have a small group of store employees set the foods in each store section out of the bags. Now students act as consumers or people who buy food from the store. Each student selects one item from the store, puts it in his/her individual bag, and hops back to their desk.

Go around the room and have each consumer tell what food item he/she selected, which food group/store section it came from, and whether it will help him/her to Go, Glow, or Grow.

Review/Summary

Review the following questions as a class.

- How many food groups are in the Healthy Hop 'n Shop grocery store?

One – grain; two – vegetables; three – fruits; four – dairy; five – meat and beans.

- Why should we eat food from all five food groups every day?

Eating a variety of foods from each of the food groups gives us the nutrients we need to keep us going, glowing, and growing.

- How many food items do we have in each store section or food group?

Count the number of packages in each food group and record them on the board.

- Which two food groups are the largest on MyPlate? Why is this so?

Grain and vegetables. We should eat more foods from the grain group to give us power and energy to “go” all day long. We need to eat more vegetables filled with vitamins, minerals, and fiber to keep us glowing or feeling good.

- What other food groups are important to eat?

Fruits, protein, and dairy. Fruits contain vitamins, minerals, and fiber. Meat and beans give us protein to help our muscles grow and repair themselves. Eggs are a part of this group too. We need calcium from milk products to keep our teeth and bones strong, especially as we grow.

Another food category, oils, is also important, but is not listed as a separate food group.

Modifications/Extensions

Use food from each group to do fun relay races. Try things like rolling eggs, carrying grapes on a spoon, holding a big carrot under your chin while you walk, and so on.

Older students can be asked to research food guides. They can look for previous models used in the United States and models used in other countries. Report the findings back to the class. As an extra credit assignment, students can develop their own healthy food guide.

Sources/Credits

Adapted from *Growing in the Garden Elementary Curriculum that Grows with the Child* written by the Iowa 4-H Development Program and revised in June 2012. The curriculum can be purchased from the Iowa State Extension Office: <http://www.extension.iastate.edu/4h/page/curricula-info-ordering>

Go, Glow, Grow

Food Group	Power	Examples	Foods
Grain	"Go"	corn, soybeans (grown as a grain, but really a legume), wheat, oats, and rice	cereal, bread, rice, pancakes, popcorn, pasta
Vegetables	"Glow"	lettuce, onions, carrots, potatoes	Salad, salsa, vegetable soup
Fruits	"Glow"	apples, strawberries, blueberries, raspberries, grapes, pears, peaches, plums	apple sauce, prunes, raisins, fruit smoothies
Milk	"Grow"	mostly animals, except for soymilk from soybean plants	yogurt, cheese, ice cream, sour cream
Meat/ Beans (Protein)	"Grow"	mostly animals, except for beans from bean plants	hamburgers, hot dogs, meat balls, black beans